



PATENT ABSTRACTS OF JAPAN

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IKOMA AKIHISA**(54) **SEAL MECHANISM**

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(57) Abstract:

PURPOSE: To prevent a seal member from extruding or being nipped, by setting an angle between an inclined plane and a sliding surface to a range of $40^\circ \sim 70^\circ$ as well as setting a ratio of length ranging from the sliding surface to the bottom of a seal groove and a heel part of the seal member to a range of $0.08W/0.4$.

CONSTITUTION: A groove 1 is formed in one side of a seal member X, and a lip 2 is formed in the upper part of the groove 1, while a slope 3 is formed at the side opposite to the groove 1, and an inclined plane 4 is formed at the opposite side to the side where high pressure acts. An angle α made up between a sliding surface 6 and the inclined plane 4 is set to $40^\circ < \alpha < 70^\circ$, and both of length ranging from the sliding surface 6 to the bottom 8 of a seal groove Y and length (a) ranging from the sliding surface 6 to a heel part 5 of the seal member X are set to $0.08 \leq a/l < 0.4$. With this constitution, if there is no backup, extrusion and nipping in the seal member X can be prevented from occurring, thus any hindrance to functions of a sliding member 9 is preventable.

